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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,223

01/10/2006

Timothy S. Coombs

COOT 8682WI

7593

1688 7590 03/10/2009  
POLSTER, LIEDER, WOODRUFF & LUCCHESI  
12412 POWERSCOURT DRIVE SUITE 200  
ST. LOUIS, MO 63131-3615

EXAMINER

HURLEY, SHAUN R

ART UNIT

PAPER NUMBER

3765

MAIL DATE

DELIVERY MODE

03/10/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,223	<b>Applicant(s)</b> COOMBS, TIMOTHY S.	
	<b>Examiner</b> Shaun R. Hurley	<b>Art Unit</b> 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/10/06, 03/23/06</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph **on a separate sheet** within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, what is meant by the phrase "designated by the requirements of a particular end use"? It is unclear how an ordinarily skilled artisan would be able to determine the fiber material to use without undue experimentation.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1, 4, 14, 15, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Guevel et al (4840021).

Guevel teaches a yarn (Figures 4) comprising an inner portion of staple plastic fibers (4) spun over a core strand (3), and an outer portion comprising a multifilament helically wrapped yarn (5), as well as the method of forming.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 3, 5-13, 16-18, 20-41, and 43-50 rejected under 35 U.S.C. 103(a) as being unpatentable over Guevel et al in view of Pepin (5487941).

Guevel essentially teaches the invention as detailed above, including the use of any suitable materials, but fails to specifically teach that the fibers are recycled PET, incapable of passing through a twenty micron opening without clogging. Pepin, however, teaches us that using such recycled fibers, inherently possessing such an inability of passing, from beverage bottles in a yarn structure is well known (Column 9, lines 41-42). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have utilized the recycled PET fibers of Pepin in the yarn of Guevel, so as to create a useful yarn while repurposing waste materials in a beneficial manner. Pepin shows that such fibers are well suited for use in yarn structures, and Guevel teaches a structure capable of and open to using such recycled fibers. In regards to the myriad of outer wrap structures claimed by Applicant, including double sheaths,

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double wrap yarns, monofilament yarns, and such, all are obvious type variants of that taught by Guevel which provide the same basic function; providing a desired degree of protection to the core subcomponents. The ordinarily skilled artisan would be more than capable of deciding which of the many well known structures to use, dependent on end use. In regards to the subsequent strength requirements of the materials, those are inherent properties of the obvious materials selected, all well known in the art. Applicant major inventive step, the use of recycled PET fibers, is addressed by the combination as detailed.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim (4614081), Keefe (4914902), Kruger et al (5735110), Bergen (5768875), Rees et al (5749212), Land et al (6410140), Mitsumoto et al (5572860), Sawhney et al (4976096), and Wasserman (4290260) all teach what is well known in the art.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun R. Hurley whose telephone number is (571) 272-4986. The examiner can normally be reached on Mon - Fri, 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shaun R Hurley  
Primary Examiner  
Art Unit 3765

SRH  
09 March 2009

/Shaun R Hurley/  
Primary Examiner, Art Unit 3765